

ARL COLLEGE STUDENT SUMMER PROGRAM
Research and Development Topics

COMPUTATIONAL & INFORMATION AND SCIENCES DIRECTORATE
(CISD)

Adelphi, Maryland
Aberdeen Proving Ground, MD

R&D Topic: OWL-Development of more effective and robust COAs and improved battle analysis techniques.

R&D Topic: Army Ontology

SENSORS AND ELECTRON DEVICES DIRECTORATE (SEDD)

Adelphi, MD

R&D Topic: Power Converters

R&D Topic: Characterization of compound semiconductor materials grown using molecular beam epitaxy.

R&D Topic: Analysis of single and dual-band infrared imagery

R&D Topic: Analysis of a code-multiplexed read-out for focal plane arrays

R&D Topic: Optical Limiters

R&D Topic: Luminescent Materials for Displays

R&D Topic: Chemical and Biological Agent Detection

R&D Topic: Research on Electrochemical Power Sources

R&D Topic: Fuel Cells Research and Development Opportunity

R&D Topic: Electromagnetic Model Development for Multilayer Radar Absorbing Materials

R&D Topic: Explore new device/circuit technologies, such as GaN, InP for millimeter-wave and digital circuit applications

R&D Topic: Investigate 3-dimensional system integration techniques for electronic-scan phased-array antenna

R&D Topic: Electronically Scanned Antenna (ESA) controls through adaptive signal processing

R&D Topic: Real-Time Digital Signal Processing

R&D Topic: High Performance Computing Implementation of a Hyperspectral Target Detector

R&D Topic: Human Detection of Targets Near Clutter

R&D Topic: Acoustic Modeling

R&D Topic: Acoustics

SURVIABILITY/LETHALITY AND ANALYSIS DIRECTORATE (SLAD)

Aberdeen Proving Ground, Maryland
White Sands Missile Range, New Mexico

R&D Topic: Acoustically Driven Microclimatic Cooling System

R&D Topic: BRL-CAD Geometric-Modeling

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R&D Topic: General Electromagnetic Model for the Analysis of Complex Systems (GEMACS)

R&D Topic: Security checklist and auditing tool for the Windows NT4.0 and 2000 operating systems

R&D Topic: Data Fusion Tool

R&D Topic: Methodology to establish essential survivability capabilities within highly integrated C4I systems

R&D Topic: Validation of scene building techniques

R&D Topic: Millimeter Wave (MMW) net canopy model

R&D Topic: Software improvements to supplement existing data reduction resources

R&D Topic: Circuit model with non-ideal elements

R&D Topic: Diagnostic Program

R&D Topic: Smart Munitions Technology

WEAPONS AND MATERIALS RESEARCH DIRECTORATE (WMRD)
Aberdeen Proving Ground, Maryland

R&D Topic: Lightweight Personnel Protection

R&D Topic: Ground Vehicle Armor Research

R&D Topic: Counter-Kinetic Energy Active Protection

R&D Topic: Anti-Armor Research

R&D Topic: Gun, Rocket, and Missile Propulsion Research

R&D Topic: Composite Materials Research

R&D Topic: Nanomaterials Research

R&D Topic: Transparent Armor Research

R&D Topic: Elastomers Research

R&D Topic: Multifunctional Protective Coatings

R&D Topic: Experimental Unmanned Vehicles